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Replacement Instructions

AlphaVision™ PC Series III Sign Controller Board Kit (pn 1234202726SP)

Overview

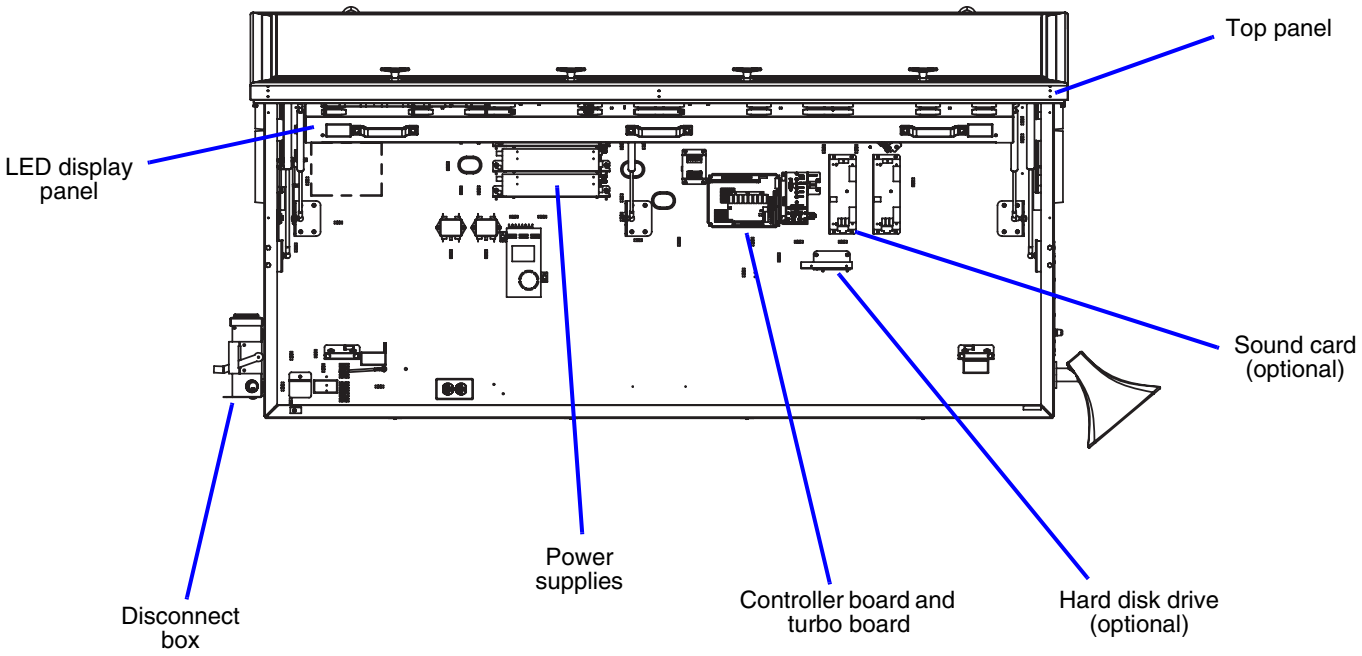
AlphaVision PC Series signs contain an embedded controller board. The controller board translates messages via ethernet and displays them on the sign. Depending on the installation of the sign, the controller board is interfaced using one of two options. One option is a modular CAT5 Ethernet network connection, and the second option is a direct connection to a monitor, keyboard, and mouse.

Attached to the controller board is a turbo board. The turbo board serves as an interface between the controller board and the display face.

Several other sign components connect to the controller board including the sound card, hard disk drive (optional), loop back boards, and power supplies.

These instructions are a guide for replacing the controller board kit into AlphaVision PC series signs.

AVPC256112T3 Series (Shown with Controller side open)



NOTE: Only one controller board is needed to operate single-sided or double-sided signs

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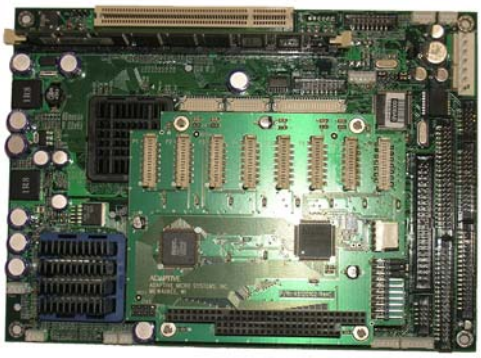
Replacing the controller board

Contents of kit

Notice: Observe appropriate precautions to prevent electrostatic discharge (ESD) or “static” damage to the replacement part. For safe handling of ESD-sensitive parts, see TechMemo #00-0005.

Part #	Quantity	Picture	Description
11279064, 12019003LF, 63000503	1		The Advantech embedded controller board (pn 11279064), turbo board (pn 12019003LF), and snap in spacers (pn 63000503) are pre-assembled at the factory. The assembly translates messages arriving via Ethernet onto the display face and interfaces with several other sign components.

Tools Required

- Phillips screwdriver
- Method for labeling cables

WARNING! Hazardous voltage. Contact with high voltage may cause death or serious injury. Always disconnect power to unit prior to servicing.

1 Disconnect all power to the sign at the power source.

2 Open the side of the sign labeled “CONTROLLER SIDE”.

WARNING! Possible fall or crush hazard. Remain clear of panel when opening.

A. Turn the top panel latches counter-clockwise and carefully open panel. Guide the panel until it is fully opened. **Do not** allow panel to swing open freely.

B. If applicable, open the LED display panel using the handles located on the bottom of panel. Guide the panel until it is fully opened. **Do not** allow panel to swing open freely.

3 Label and disconnect all cables connected to the current controller board.

Refer to Controller board connection diagram on page 4 for details.

4 Remove the controller board from the sign.

A. Remove and retain all mounting hardware from the old controller board.

B. Dispose of old controller board.

5 Attach new controller board to the sign.

A. Position the new controller board with all the cable connections accessible from the controller side of the sign. When mounted correctly the power terminal connection on the controller board is in the upper left hand corner.

B. Secure new controller board to the sign with previously removed mounting hardware.

6 Connect cables to the new controller board.

Refer to Controller board connection diagram on page 4 for details.

Cable connections are keyed and only fit one way on the controller board, except for the audio cable. If applicable, ensure the red rib on the audio cable is positioned on the side closest to the controller board's top right mounting hole.

7 Verify all cable connections are seated tightly.

8 Apply power to the sign at the power source.

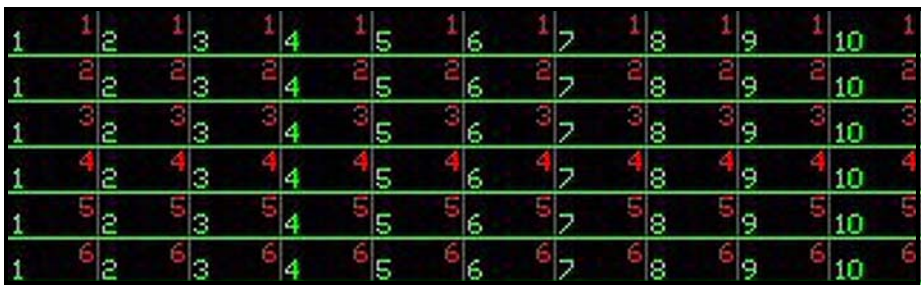
9 Test and verify sign operation.

At the computer, click **AVPC Settings** in the system tray, or select **Start > All Programs > Adaptive Micro Systems > AVPC Settings**.

- If applicable**,** click **Tune Blaster** and select **COM1** to run one of the following tests on the 1st sound card.
  - Click the **Play Tune** or **Query Tune Blaster** button to prompt the sound card.
  - To test the 2nd sound card, click **Tune Blaster** and select **COM2.** Repeat the same testing procedure.
- Click on **Test Mode** and select **Grid Pattern** to run tests.
  - Click the **Start LED Test** button to display the grid pattern (see diagram).
  - Click the **Stop LED Test** button to remove the grid pattern.

If the test fails, disconnect power from the sign, open sign panels, and verify all cable connections are seated tightly. Close sign panels, apply power to the sign, and repeat testing procedure.

NOTE: Grid pattern numbers are based on the size of your sign. Green numbers horizontally increase by increments of 1 and red numbers downwardly increase by increments of 1. (AVPC320096T3 grid pattern shown)



Controller board connection diagram